UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,072	10/03/2003	Rodney Fulton	996258-2	3389

7590 08/27/2007

Camille L. Urban
Brown,Winick,Graves,Gross,Baskerville &Schoenebaum
Regency West5, 4500 Westown Parkway - Ste. 277
West Des Moines, IA 50266

EXAMINER	
KWIECINSKI, RYAN D	
ART UNIT	**PAPER NUMBER**
3635	
MAIL DATE	**DELIVERY MODE**
08/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/679,072	FULTON ET AL.	
	Examiner	Art Unit	
	Ryan D. Kwiecinski	3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 May 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) *10-12,14,17-19 and 22* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9, 13, 15-16, 20-21, and 23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☒ Other: *Exhibit X, Exhibit Y*.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3,5-9,13,15, and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,299,399 to Baier et al.

Claim 1:

Baier et al. teaches an apparatus for venting ornamental windows covered by a protective panel comprising:

a) an ornamental window (14, Fig.2);

b) a protective panel (32, Fig.2);

c) a framing element (K, Exhibit X);

d) at least one airspace between said window and said protective panel (34, Fig.2);

e) venting means (40, Fig.2) comprising an entry vent opening (B, Exhibit X) and an exit vent opening (Column 3, lines 13-15);

f) said entry vent opening comprising a first path (A, Exhibit X) and a first interior vent opening (C, Exhibit X) to said airspace, said exit vent opening comprising a second path and a second interior vent opening to said airspace.

Baier et al. also discloses entry vent openings and exit vent openings on the outside of the apparatus (Fig.6).

It would have been obvious to construct the apparatus of Baier et al. with the venting means openings on the outside of the apparatus in order to allow the openings to be in direct contact with the surrounding atmosphere. This will enable a sufficient amount of air to enter and exit the vent openings. Also since it is obvious to place the openings on the outside of the apparatus, the vent now cause the air to make three directional turns, the air entering the vent, the air turning upward inside of the vent, and the air turning into the air space between the panes.

With the patent disclosing the structure of a vent in each of the four corners of the framed window, each opening vent pairs with an identical exiting vent. This will be true throughout the entire action when referring to the exit portion of the vents.

Claim 2:

Baier teaches an apparatus for venting ornamental windows as claimed in claim 1 wherein each said entry vent opening further comprises a first area (D, Exhibit Y), said exit vent opening further comprises a second area; said first interior vent opening comprises a third area (E, Exhibit Y) and said second interior vent opening comprises a fourth area; said first path comprises a first cross sectional area (F, Exhibit Y); said second path comprises a second cross sectional area; said first area at least equals said first cross sectional area and

said first cross sectional area does not exceed said third area (Referring back to Exhibit X, first area equals the first cross sectional area and the third area exceeds the first cross sectional area); and said second area at least equals said second cross sectional area and said second cross sectional area does not exceed said fourth area.

Claim 3:

Baier et al. teaches the apparatus for venting ornamental windows as claimed in claim 2 but does not teach where said first area equals at least one square inch for each about 2000 to 2500 square inches of ornamental window to be vented.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have created Baier's vent openings and paths large enough to effectively allow air to circulate through the inner space of an ornamental window. For a larger window, there clearly needs to be either larger vent openings or a larger number of vent openings to properly circulate the air through the airspace to prevent moisture from building up in the airspace. The size of the vent opening in comparison to the ornamental window and protective panel was an obvious design choice.

Claim 5:

Baier et al. teaches the apparatus for venting ornamental windows as claimed in claim 1 wherein said first interior vent opening is spaced vertically

above said entry vent opening to prevent entry of rainwater into said air space (Exhibit X).

Claim 6:

Baier et al. teaches an apparatus for venting ornamental windows covered by a protective panel comprising:

a) an ornamental window (14, Fig.2);

b) a protective panel (32, Fig.2);

c) a framing element (K, Exhibit X);

d) at least one airspace between said window and said protective panel (34, Fig.2);

e) venting means (40, Fig.2) comprising a plurality of pairs (Column 3, lines 13-15) of vent openings each pair having an entry vent opening (B, Exhibit X) having a first area (D, Exhibit Y) and an exit vent opening having a second area;

f) each said entry vent opening comprises a first path (A, Exhibit X) and a first interior opening (C, Exhibit Y) and each said exit vent opening comprises a second interior opening and a second path; and

g) for each said entry vent opening, said first interior opening comprises a third area (E, Exhibit Y) and for each said exit vent opening, each said second interior opening comprises a fourth area, each said first path comprises a first cross-sectional area (F, Exhibit Y) and each said second path comprises a second cross-sectional area.

Baier et al. also discloses entry vent openings and exit vent openings on the outside of the apparatus (Fig.6).

It would have been obvious to construct the apparatus of Baier et al. with the venting means openings on the outside of the apparatus in order to allow the openings to be in direct contact with the surrounding atmosphere. This will enable a sufficient amount of air to enter and exit the vent openings. Also since it is obvious to place the openings on the outside of the apparatus, the vent now cause the air to make three directional turns, the air entering the vent, the air turning upward inside of the vent, and the air turning into the air space between the panes.

Claim 7:

Baier et al teaches the apparatus for venting ornamental windows as claimed in claim 6 wherein for each said entry vent opening, said first area at least equals first cross sectional area and said first cross sectional area does not exceed said third area, but does not teach wherein a sum of all said first areas is at least one square inch for every 2000-2500 square inches of ornamental window.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have created Baier's vent openings and paths large enough to effectively allow air to circulate through the inner space of an ornamental window. For a larger window, there clearly needs to be either larger vent openings or a larger number of vent openings to properly circulate the air

through the airspace to prevent moisture from building up in the airspace. The size of the vent opening in comparison to the ornamental window and protective panel was an obvious design choice.

Claim 8:

Baier et al. teaches an apparatus for venting ornamental windows as claimed in claim 7 wherein for each said exit vent opening, said fourth area at least equals said second cross sectional area and said second cross sectional area does not exceed said second area (Exhibit X and Y).

Claim 9:

Baier et al. teaches an apparatus for venting ornamental windows covered by a protective panel comprising:

a) an ornamental window (14, Fig.2);

b) a protective panel (32, Fig.2);

c) at least one framing element (K, Exhibit X);

d) at least one airspace between said window and said protective panel (34, Fig.2);

e) venting means (40, Fig.2) comprising at least one pair of vent openings (Column 3, lines 13-15) each pair comprising an entry vent opening (B, Exhibit X) having a first area (D, Exhibit Y) and an exit vent opening having a second area;

f) each said entry vent opening comprises a first proximal path (A, Exhibit X) having a first proximal cross section (F, Exhibit Y), a first inside opening (G, Exhibit X), a first distal path (H, Exhibit X) having a first distal cross section (I,

Exhibit Y) and a first interior opening (C, Exhibit X) all for allowing air to flow into said airspace and each said exit vent opening comprises a second proximal path having a second proximal cross section, a second inside opening, a second distal path having a second distal cross section and a second interior opening all for allowing air to flow out of said airspace',

g) said first interior opening comprises a third area (E, Exhibit Y) and said second interior opening comprises a fourth area;

h) said first inside opening comprises a fifth area (J, Exhibit Y) and said second inside opening comprises a sixth area;

i) for each said entry vent opening, said first area does not exceed said first proximal cross sectional area, said fifth area at least equals said first proximal cross sectional area, said first distal cross sectional area at least equals said fifth area, and said third area at least equals said first distal cross sectional area (Exhibit X shows the widths of the paths and opening which correspond with the structure in claim 9,i); and

j) for each said exit vent opening, said fourth area does not exceed said second distal cross sectional area, said sixth area at least equals said second distal cross sectional area, said second proximal cross sectional area at least equals said sixth area and said second area at least equals said second proximal cross sectional area.

Baier et al. also discloses entry vent openings and exit vent openings on the outside of the apparatus (Fig.6).

It would have been obvious to construct the apparatus of Baier et al. with the venting means openings on the outside of the apparatus in order to allow the openings to be in direct contact with the surrounding atmosphere. This will enable a sufficient amount of air to enter and exit the vent openings. Also since it is obvious to place the openings on the outside of the apparatus, the vent now cause the air to make three directional turns, the air entering the vent, the air turning upward inside of the vent, and the air turning into the air space between the panes.

Claim 13:

Baier et al. teaches the apparatus for venting ornamental windows as claimed in claim 9 wherein said at least one framing element is a perimeter frame which holds only said protective panel (K, Exhibit X) and said airspace is defined by a separation between said protective panel and said ornamental window.

Claim 15:

Baier et al. teaches the apparatus for venting ornamental windows as claimed in claim 9 wherein at least one of said entry vent openings includes a debris deterring accessory (36, Fig.2 or 72, Fig.13).

Claim 20:

Baier et al. teaches the apparatus for venting ornamental windows as claimed in claim 13 wherein said first interior vent opening is spaced vertically above said entry vent opening to prevent rain from entering said airspace (Exhibit X).

Claim 21:

Baier et al. teaches the apparatus for venting ornamental windows as claimed in claim 13 wherein at least one of said entry vent openings includes a debris deterring accessory (36, Fig.2 or 72, Fig.13).

Claims 4, 16, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,299,399 to Baier et al in view of USPN 4,656,803 to Chludil.

Claim 4:

Baier et al. teaches the apparatus for venting ornamental windows as claimed in claim 3 but does not teach wherein said entry vent opening is covered by a screen such that is has an effective first area of 66% such that said first area at least equals 1.66 square inches for each about 2000 to 2500 square inches of ornamental window.

Chludil teaches wherein said entry vent opening is covered by a screen (Fig.2) such that is has an effective first area of 66% such that said first area at least equals 1.66 square inches for each about 2000 to 2500 square inches of ornamental window.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have covered Baier's venting means with a screen to deter debris and insects from entering the vent openings. Using a screen to

deter debris and insects from entering an opening is notoriously well known in the art and would have been an obvious design choice. It would have also been obvious to have created Baier's vent openings and paths large enough to effectively allow air to circulate through the inner space of an ornamental window. For a larger window, there clearly needs to be either larger vent openings or a larger number of vent openings to properly circulate the air through the airspace to prevent moisture from building up in the airspace. The size of the vent opening in comparison to the ornamental window and protective panel was an obvious design choice.

Claims 16 and 23:

Baier et al. teaches the apparatus for venting ornamental windows as claimed in claim 9 and as claimed in claim 13, Baier et al. does not teach wherein said debris deterring accessory is a screen or further comprising at least one screen proximal one of said entry vent openings for deterring entry of debris.

Chludil teaches wherein said debris deterring accessory is a screen (Fig.2) or further comprising at least one screen proximal one of said entry vent openings for deterring entry of debris (S, Fig.1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have covered Baier's venting means with a screen to deter debris and insects from entering the vent openings. Using a screen to deter debris and insects from entering an opening is notoriously well known in the art and would have been an obvious design choice.

Response to Arguments

Applicant's arguments with respect to claims 1, 6, and 9 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed 22 May 2007 have been fully considered but they are not persuasive. The size of the vent openings in the window apparatus is an obvious design choice, nowhere in the specification does it say that the size is critical, that there is no other way to construct the window apparatus. The specification recites, "The vent openings of the venting means must be of an adequate size so that effective air circulation in the space is achieved thereby minimizing heat or moisture damage to said ornamental window. Specifically there is **recommended** at least about 1 square inch of 100% effective vent opening, both entry and exit, for about 2000-2500 square inches of stained glass. Opening for vents that are screened are **usually** around 60% effective" (Page 4, lines 9-14). The terms "recommended" and "usually" render the recitations are mere suggestions and approximations.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan D. Kwiecinski whose telephone number is (571)272-5160. The examiner can normally be reached on Monday - Friday from 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571)272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RDK

RICHARD E. CHILCOT, JR.
SUPERVISORY PATENT EXAMINER

EXHIBIT X APPL # 10/679,072

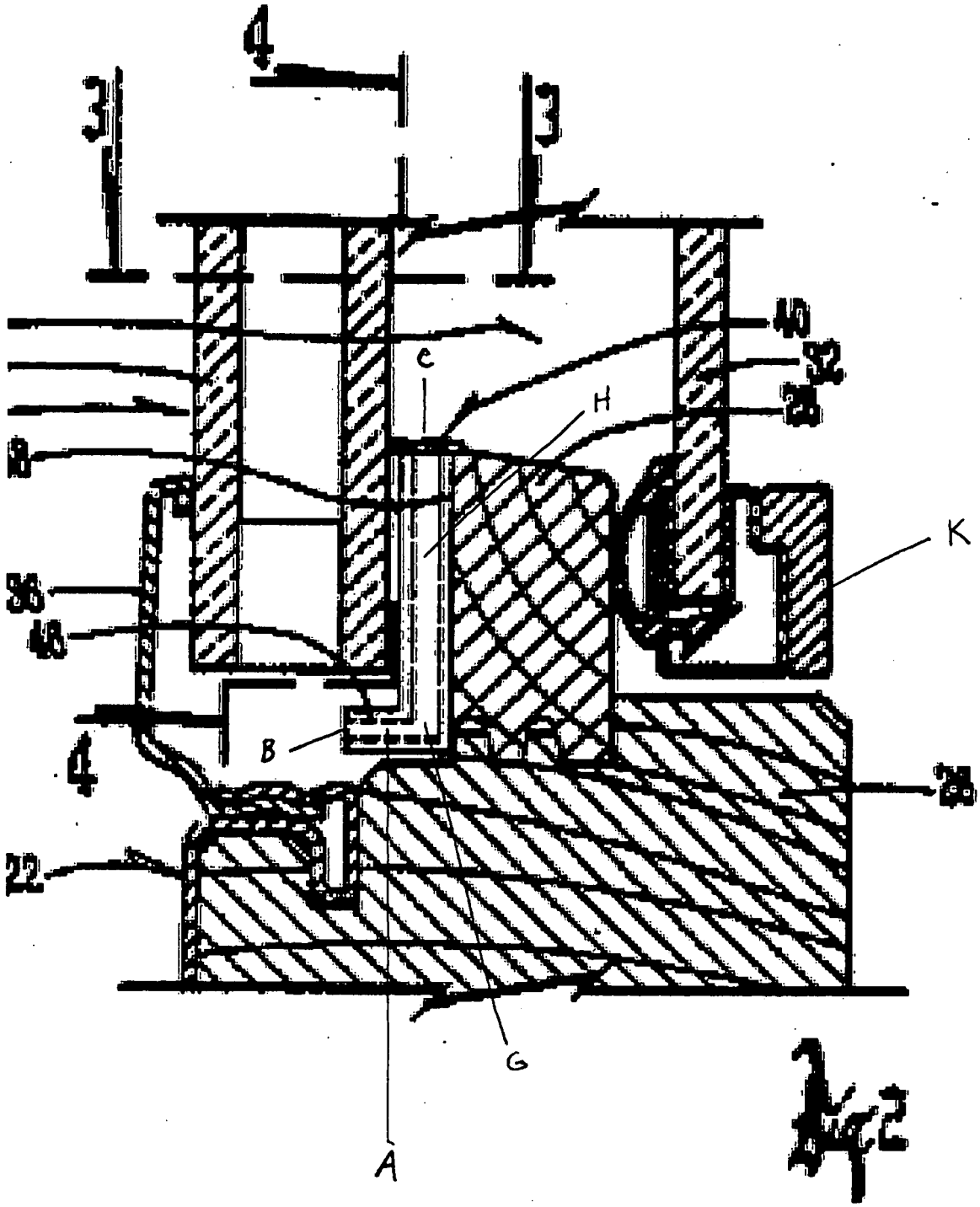

Fig 2

EXHIBIT Y

APPL # 10/679,072

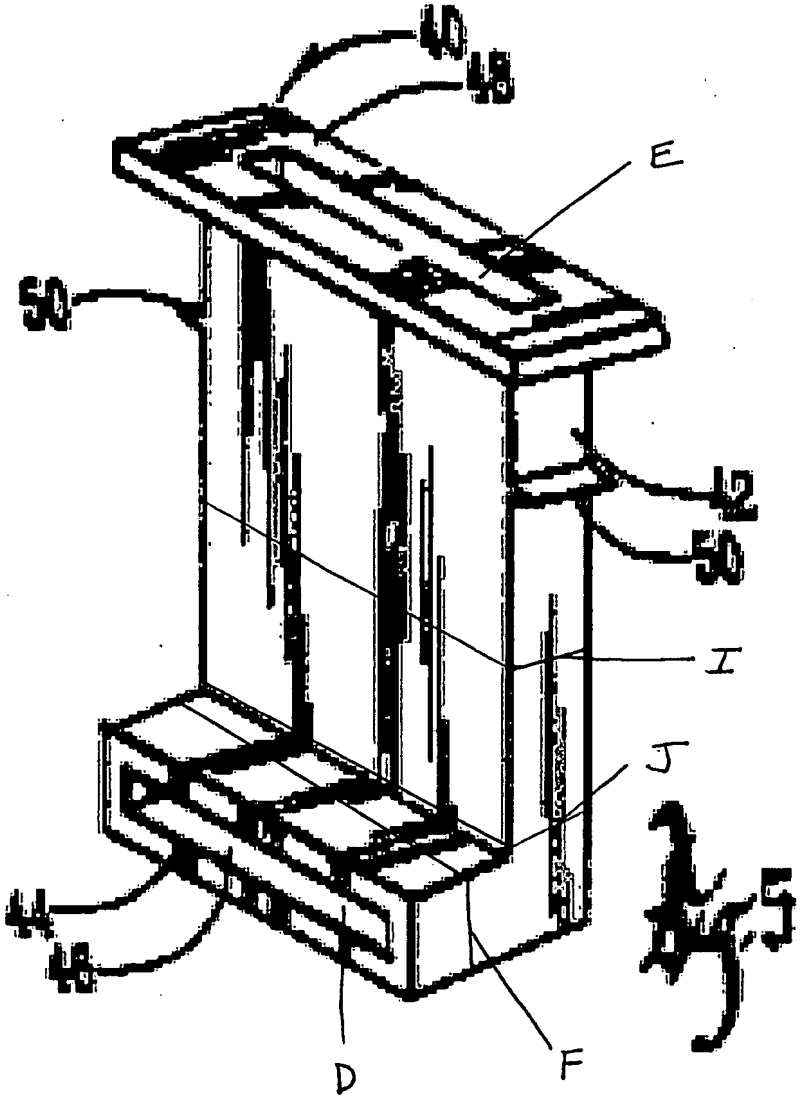

Fig. 5